

Remarks:

Reconsideration of the application is requested.

Claims 1 to 6 remain in the application. Claims 1, 5, and 6 have been amended.

In item 2 on page 2 of the above-identified Office action the Examiner has requested the publication date for the article "Goss exhibits futuristic concept press". The exact date of this article is unknown, however its publication is known to be at least as early as July 31, 1998, the date on which it was discovered online.

In item 3 on page 3 of the Office action the Examiner has objected to the drawings. The Figs. 4 to 6 have been amended to overcome the objection in the manner suggested by the Examiner. Marked up copies of the drawings, which are included show changes in red. The specification has been changed accordingly.

In item 4 on page 3 of the Office action, the disclosure is objected to because of the following informalities: On page 10, line 13, the description is unclear as to where the grippers 7 are provided. With regard to page 14-16 the Examiner states that the same numerals as those used on the

previous pages in describing Figs. 1-3 are used to represent modified versions of those features in describing Figs. 4-6. The specification has been amended to overcome the objection in the manner suggested by the Examiner.

In item 5 on page 4 of the Office action, claims 1 to 6 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph

More specifically, the Examiner has stated that in claim 1, line 2, use of the term "cylinder" renders the limitation vague and indefinite. The term "cutting cylinder" is a generic term in the field of folding apparatuses. This term is understood to be any kind of rotating element carrying a cutting blade, which does not necessarily have to be purely cylindrical in shape, but can be of a different shape such as the one shown in Figs. 1 to 5 of the instant application.

The Examiner has stated that in claim 1, line 3, the phrase "configured to cooperate" and in line 9 the recitation "being connected to" render the claim vague and indefinite. In order to facilitate prosecution these lines have been rewritten as to overcome the rejection.

The Examiner has stated that in claim 4, lines 2-3, the recitation "each connected to" renders the claim vague and

indefinite, particularly since it seems that the gripper and tucking blade are each part of the transfer cylinder and it's not clear how they can be both part of and connected to the transfer cylinder. Although the gripper and tucking blade are mounted at the transfer cylinder, they are a separate movable part of the cylinder, thereby connected to and part of the transfer cylinder.

The Examiner has stated that in claim 5, line 5, the recitation "rotating in synchronism" renders the claim vague and indefinite since sufficient structure has not been set forth to perform such a function. It is noted that there is nothing inherently wrong with defining some part of the invention in functional terms and that functional language does not, in itself, render a claim improper. A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of skill in the art. Functional language may therefore be present in a claim as long as the claim particularly points out and distinctly claims the subject matter of the invention. Nevertheless, to facilitate prosecution claim 5 has been amended.

The Examiner has stated that in claim 6, line 2, the recitation "has a constant speed" renders the claim vague and indefinite since sufficient structure has not been set forth

to perform such a function. As mentioned above, there is nothing inherently wrong with defining some part of the invention in functional terms and that functional language does not, in itself, render a claim improper. A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of skill in the art. Functional language may therefore be present in a claim as long as the claim particularly points out and distinctly claims the subject matter of the invention. Nevertheless, to facilitate prosecution claim 6 has been amended.

In view of the foregoing, the rejection under 35 U.S.C. § 112, is believed to have been overcome and reconsideration and allowance of claims 1 to 6 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, he is respectfully requested to telephone counsel so that, if possible, patentable language can be worked out.

Petition for extension is herewith made. The extension fee for response within a period of 2 months pursuant to Section 1.136(a) in the amount of \$390 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner & Greenberg P.A., No. 12-1099.

Respectfully submitted

For Applicant(s)

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September 20, 2001

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Marked-up version of the specifications:

Replace the paragraph between page 10, line 9 and page 11, line 7 with the following: -- The cutting cylinder 3 has cutting blades for cutting a ribbon 1 into signatures of a desired length. The transfer cylinder 4 has cutting ledges 11 that cooperate with the cutting blades 13 of the cutting cylinder 3 for cutting the ribbon 1 into signatures. Grippers 7 are provided on gripper shafts 14 and along the periphery of the transfer cylinder 4 for holding the signatures. Instead of using grippers as holding devices it is also possible to use pins or any other holding devices that are suitable for holding a leading edge. The transfer cylinder 4 also has adjustable diameter portions provided along its periphery. Each adjustable diameter portion is able to adjust the size of a portion of the transfer cylinder 4. Thus the effective diameter of the transfer cylinder 4 and the cutting cylinder 3 are adjustable to produce signatures of variable length. The adjustable diameter portions can for example be embodied as adjustable rollers 9. As is indicated by the arrows in the adjustable rollers 9, each adjustable roller 9 can be adjusted by a jack 15 such as an eccentric jack or a linear jack, or by any other suitable adjusting device. Fig. 1 illustrates how the size of adjustable portions of the transfer cylinder can be adjusted by retracting and extending the adjustable rollers 9, in other words by moving the adjustable rollers 9 toward

and away from the central axis 12 of the transfer cylinder 4 for decreasing and increasing the size of the adjustable portions of the transfer cylinder 4. --

Replace the paragraph between page 13, line 25 and page 14, line 24 with the following: -- Fig. 3 is a diagrammatic side view of a second embodiment of a variable length cutoff folder adjusted for a reduced signature length. Equivalent elements of the different embodiments are indicated with identical reference numerals. Fig. 3 shows a cutting cylinder 3 that can be moved toward and away from the transfer cylinder 4. The transfer cylinder 4 has cutting ledges 11 and holding devices 7 such grippers or pins provided along the peripheral region of the transfer cylinder 4. The grippers 7 are mounted on gripper shafts 14. The grippers 7 together with the cutting ledges 11 can be moved toward and away from the central axis 12 of the transfer cylinder 4 in order to adjust the effective diameter of a portion of the transfer cylinder 4. Fig. 3 illustrates the position of the cutting ledge 11 and the gripper 7 in a retracted position for signatures having a reduced length. The cutting cylinder 3 is moved toward the transfer cylinder 4 so that the blades 13 of the cutting cylinder 3 contact the cutting ledges 11 during a cutting operation. If an increased signature length is desired, the cutting ledges 11 together with the grippers 7 are moved outward and away from the central axis 12 of the

transfer cylinder 4, thus increasing the effective diameter of portions of the transfer cylinder 4. Fig. 4 illustrates the expanded position of the grippers (holding devices) 7' and the cutting ledges 11' for an increased signature length. The cutting cylinder 3 is moved away from the transfer cylinder 4' in order to cooperate with the cutting ledges 11'.--

Replace the paragraph between page 15, line 1 and page 15, line 16 with the following: -- Fig. 5 is a cross-sectional view of the variable length cutoff folder shown in Fig. 3. Fig. 5 also illustrates a position of the cutting ledges 11' and the grippers 7' in a retracted position for signatures having a reduced length. In other words the cutting ledges 11' and the grippers (holding devices) 7' have been moved in a direction toward the central axis 12 of the transfer cylinder 4'. The cutting cylinder 3 has been moved toward the transfer cylinder 4' so that the blades 13 of the cutting cylinder 3 contact the cutting ledges 11' during a cutting operation. Fig. 5 illustrates in an exemplary manner the dimensions of the transfer cylinder 4'. The diameter of the transfer cylinder 4' is 1000 mm. The length of the ribbon 1, from the cutting ledge 11' to the next following tucking blade 6 is 299.47 mm, which is the sum of the straight line having a length of 258.11 mm and the curved line having a length of 41.36 mm as shown in Fig. 5.--

Replace the paragraph between page 15, line 18 and page 19, line 3 with the following: -- Fig. 6 is a cross-sectional view of the variable length cutoff folder shown in Fig. 4. The cutting ledges 11' and the grippers 7' are in an expanded position for signatures having an increased length. The cutting cylinder 3 has been moved away from the transfer cylinder 4' so that the blades 13 of the cutting cylinder 3 contact the cutting ledges 11' during a cutting operation. The diameter of the transfer cylinder 4' is 1000 mm. The length of the ribbon 1, from the cutting ledge 11' to the next following tucking blade 6 is 310.02 mm, which is the sum of the straight line having a length of 283.19 mm and the curved line having a length of 26.83 mm, as shown in Fig. 6. --

Marked-up version of the claims:

Claim 1 (amended). A variable length cutting device, comprising:

a cutting cylinder;

a transfer cylinder cooperating [configured to cooperate] with said cutting cylinder for cutting a ribbon into signatures having a desired cutoff length, said transfer cylinder having a central cylinder axis and a circumferential region; and

an adjustable diameter portion disposed in said circumferential region of said transfer cylinder, said adjustable diameter portion [being connected to said transfer cylinder and] being movable in a direction toward and away from said central cylinder axis for adjusting the desired cutoff length of the signatures.

Claim 5 (amended). The cutting device according to claim 1, including a cutting blade fixed to said cutting cylinder and a cutting ledge disposed in said circumferential region of said transfer cylinder for cooperating with said cutting blade, and means for rotating said cutting cylinder and said transfer cylinder [rotating] in synchronism.

Claim 6 (amended). The cutting device according to claim 1, [wherein] including means for rotating said transfer cylinder [has] at a constant angular speed.